



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,890	02/27/2002	Narayanan Venkitaraman	CM05034H	2114
22917	7590	12/08/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			HARPER, KEVIN C	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/083,890

Applicant(s)

VENKITARAMAN ET AL.

Examiner

Kevin C. Harper

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16, 19, 20 and 24-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16, 19, 20 and 24-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Response to Arguments***

Applicant's arguments filed November 15, 2005 concerning the Malki reference have been fully considered but they are not persuasive. Applicant argued that Malki does not disclose maintaining a binding update list. However, in Malki (para. 32, lines 18-19), the mobile node inherently has maintained a list of correspondent nodes because a binding update is sent to each correspondent nodes it is communicating with.

Applicant's arguments, with respect to the Markki reference have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lim.

***Response to Amendment***

The affidavit filed on November 15, 2005 under 37 CFR 1.131 is sufficient to overcome the Markki reference.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 16, 19, 20 and 24-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lim (US 6,697,355) in view of Malki et al. (US 2001/0046223).

1. Regarding claims 16, 19 and 24-29, Lim discloses in a communication system supporting mobile IP (abstract, lines 1-2), where a mobile node (fig. 3, MHT) connects to a network infrastructure (item 400) via a gateway router (GWR1 or GWR2), a method comprising the

Art Unit: 2666

mobile node attaching to a mobile gateway router (fig. 3, MRT21) associated with a mobile network which is a home network of the mobile node (col. 5, lines 44-47). However, Lim does not disclose the mobile node determining that it is attached to the mobile gateway router, obtaining a care-of-address, sending the care-of-address to the home agent of the mobile node, and maintaining a binding update list of correspondent nodes that the mobile node has been communicating with. Malki discloses a mobile node determining that it is attached to a mobile gateway router (figs. 2-3; para 32, lines 1-5), determining a care-of-address that is the home address of the mobile gateway node (para. 32, lines 6-10), sending the care-of-address to the home agent of the mobile node (para. 32, lines 15-19), and maintaining an inherent binding update list of correspondent nodes that the mobile node has been communicating with (para. 32, lines 18-19). Further regarding claim 19, the mobile node of Malki is a mobile router (note: the mobile node performs Internet routing functions by forwarding IP packets to correspondent nodes -- para. 9, lines 8-10). Regarding claim 28, the binding update is sent in response to a tunneled packet from a correspondent node (fig. 10, steps 1010, 1020, 1040). Regarding claim 29, the mobile node identifies a packet from a correspondent node that did not traverse the home agent (fig. 10, step 1030; para. 50, last four lines). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to self-register the mobility of a mobile node with a home agent in the invention of Lim in order to enhance mobility registration by controlling network messages by the mobile node (Malki, para. 54, last nine lines).

2. Regarding claim 20, in Lim the mobile node (fig. 3, MHT) is detached from a mobile network (fig. 3, item 302; col. 5, lines 47-50).

3. Regarding claims 30-37, Lim discloses a mobile router having mobile nodes (fig. 3). However, Lim does not disclose detaching from the mobile gateway router, attaching to a second mobile gateway router and sending binding updates. Malki discloses choosing a new mobility point and sending binding updates (fig. 7, steps 710, 720 and 760) to correspondent nodes of a binding update list (para. 32, lines 18-19). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to self-register the mobility of a mobile node with a home agent in the invention of Lim in order to enhance mobility registration by controlling network messages by the mobile node (Malki, para. 54, last nine lines) and provide for free movement within a communications system (para. 4, lines 1-5).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Harper whose telephone number is 571-272-3166. The examiner can normally be reached weekdays from 11:00 AM to 7:00 PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao, can be reached at 571-272-3174. The centralized fax number for the Patent Office is 571-273-8300. For non-official communications, the examiner's personal fax number is 571-273-3166 and the examiner's e-mail address is kevin.harper@uspto.gov.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications associated with a customer number is available through Private PAIR only. For

Art Unit: 2666

more information about the PAIR system, see [portal.uspto.gov](http://portal.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Kevin C. Harper", written in a cursive style.

Kevin C. Harper

December 6, 2005